

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

NOT FOR PUBLICATION

WEEKS MARINE, INC.,

Plaintiff,

v.

TDM AMERICA, LLC,

Defendant.

TDM AMERICA, LLC, and UTEX
HOLDINGS, LLC,

Counterclaim-Plaintiffs,

v.

WEEKS MARINE, INC.,

Defendant.

TDM AMERICA, LLC, and
UTEX HOLDINGS, LLC,

Plaintiffs,

v.

GLOUCESTER COUNTY
IMPROVEMENT AUTHORITY,

Defendant.

Civil Action No. 11-3850 (ES) (CLW)

OPINION

Civil Action No. 11-4338 (ES) (CLW)

SALAS, DISTRICT JUDGE

This matter is before the Court by way of TDM America LLC's ("TDM") and UTEX Holdings, LLC's ("UTEX") application for a preliminary injunction in two related actions

pursuant to 35 U.S.C. § 283 and Fed. R. Civ. P. 65. TDM's motion is at Docket Entry 14 in Civil Action No. 11-3850 and at Docket Entry 7 in Civil Action No. 11-4338. For the reasons set forth below, the application for preliminary injunction is hereby DENIED.

I. FACTS

A. Parties, Proceedings, and Positions

The underlying issue in both cases is whether Weeks Marine and the Gloucester County Improvement Authority ("GCIA", collectively, "Defendants") have infringed U.S. Patent No. 6,293,731 ("the '731 patent" or "'731"), claiming a method for in-barge dredging. Weeks Marine is currently dredging a port in Paulsboro, New Jersey, (the "Paulsboro Project"), under a contract with GCIA, a county agency, who is the agent for South Jersey Port Corporation ("SJPC"). (Oral Argument on Motion to Dismiss, the "MTD OA" Tr. at 48:24-49:3). TDM, the owner of '731, and UTEX, TDM's licensee and corporate parent, (collectively, "Plaintiffs"), argue that the Court should issue a preliminary injunction against Weeks Marine and GCIA based on their alleged infringement of the '731 patent.

On July 5, 2011, Weeks Marine sued TDM for declaratory judgment of non-infringement and invalidity relating to the '731 patent. (*Complaint*, D.E. 1 (11-3850)). On July 27, 2011, TDM filed a complaint alleging patent infringement against GCIA and SJPC, instituting a parallel proceeding.¹ (*Complaint*, D.E. 1 (11-4338)). On August 10, 2011, TDM filed its initial answer and counterclaims. (D.E. 13 (11-3850)).² On the same day, TDM and UTEX moved for a Temporary Restraining Order and Preliminary Injunction, the motion at issue here. (D.E. 14 (11-3850), D.E. 7 (11-4338)). The Court denied the Temporary Restraining Order following oral

¹ On August 18, 2011 TDM voluntarily dismissed SJPC from the suit, (D.E. 11 (11-4338)), and filed an Amended Complaint, adding UTEX as a co-plaintiff. (D.E. 12 (11-4338)).

² On August 19, 2011, TDM filed an answer with amended counterclaims, indicating that UTEX was an exclusive licensee of TDM and a counterclaim-plaintiff. (D.E. 30 (11-3850)).

argument. (D.E. 15 (11-3850), D.E. 8 (11-4338)). On November 14, 2011, the Court denied Defendants' motion to dismiss, finding that TDM and UTEX Holdings, LLC—and only those entities—have standing to sue. (D.E. 79 (11-3850), D.E. 46 (11-4338)).

At issue here is whether the Court should “enjoin defendants from using in the United States [Plaintiffs'] in-barge method for treating dredged materials that infringes [the ‘731 patent] pending final resolution of this dispute.” (Pl. Moving Br. at 2). Plaintiffs argue that “[u]nless defendants are enjoined forthwith from infringing TDM’s patent, TDM will suffer irreparable harm to its exclusive and valuable research and development efforts, its business plans and multi-million dollar investment, well-deserved reputation, goodwill and business relationships.” (*Id.* at 1-2). Defendants argue that Plaintiffs fail to meet their “heavy burden of proving that [they are] likely to succeed on the merits of [their] motion and that without a preliminary injunction, [Plaintiffs] will suffer irreparable harm that is not outweighed by the harm to [Defendants] and the public if the injunction is granted.” (Def. Opp. Br. at 1). Defendants further argue that “[s]ubstantial questions regarding the validity and infringement of [the ‘731 patent] also preclude the issuance of a preliminary injunction.” (*Id.*).

B. Pre-Suit Dealings, the Paulsboro Project, and Weeks Marine’s Allegedly Infringing Activities

Plaintiffs and Defendants have been in contact since at least July 2010 regarding in-barge dredging processes. (Declaration of Expert Luke Kollasch in Support of Plaintiffs’ Moving Brief, the “Kollasch Moving Decl.” ¶¶ 1, 11; Declaration of Eric D. Dickerson in Support of Weeks Marine, Inc.’s Opposition Brief, the “Dickerson Opp. Decl.” ¶ 15-17). The parties dispute the nature of these pre-suit conversations. Plaintiffs contend that Defendants were stringing Plaintiffs along with the promise of a joint venture so that Defendants could learn about in-barge dredging only to cancel the joint venture at the last moment, cutting Plaintiffs out of the

deal. (*See* Kollasch Moving Decl. ¶¶ 15-25). Under the proposed joint venture, Weeks Marine would dredge a particular site, then bring the resulting dredged material (“DM”) to GATX, a brownfield remediation site in Staten Island for which TDM is currently in contract, but does not yet own. Defendants, on the other hand, contend that Plaintiffs engaged Defendants for purposes of luring Defendants into paying a licensing fee for a process Defendants did not think they infringed. (Dickerson Opp. Decl. ¶¶ 15-19). At some point, based on the parties’ different views of their relationship, discussions broke down, and Weeks Marine began pursuing the Paulsboro Project. The permitting and contracting for the project proceeded as follows.

In October 2010, GCIA gave public notice that it was soliciting sealed bids for bulkhead, dredging and subgrade preparations for the Paulsboro Project, which involves “a multi-phase, multi-million [sic] project to develop a deepwater port and marine terminal in Paulsboro, New Jersey on the site of a former refinery.” (*Id.* ¶ 5). One source suggested that the new Port of Paulsboro would be the ““largest economic development project that Gloucester County has ever undertaken.”” (*Id.* ¶ 12 (quoting *New \$250 Million SJPC Marine Terminal in Paulsboro Is SNJBP’s Quarterly Impact Award Winner*, SNJ Business People, June 8, 2011)).

In preparation for receiving bids, SJPC and GCIA pursued the necessary permits. On October 15, 2010, the State of New Jersey Department of Environmental Protection (“NJDEP”) issued a construction permit to SJPC, mandating that its eventual contractor must “[d]redge and dispose approximately 86,000 CY [cubic yards] of fine grain material, containing contaminants of concern (COC’s) exceeding Residential Direct Contact Soil Remediation Standards (RDCSRS), in the Gloucester County Solid Waste Complex.” (Pl. Moving Br. Ex. 4 ¶ d.1, the “October 15, 2010 Paulsboro Permit”).³

³ On January 28, 2011, the Department of the Army issued a related permit, authorizing SJPC to construct the Paulsboro Marine Terminal in the Borough of Paulsboro in Gloucester County, New Jersey. The permit clarified,

In an effort to become the Paulsboro contractor, Weeks Marine submitted its bid to GCIA on December 16, 2010, becoming one of six bidders. (Dickerson Opp. Decl. ¶ 10; Pl. Moving Br. Ex. 4). Neither TDM nor its affiliates submitted bids. (*Id.* ¶ 24). Later that month, GCIA awarded Weeks Marine the contract. (Declaration of Marlin Peterson in Support of Def. Opp. Br., the “Peterson Opp. Decl.” ¶ 9). On February 18, 2011, GCIA acknowledged that it had awarded Weeks Marine the Paulsboro contract “to perform the PMT-004 Bulkhead, Dredging and Subgrade preparation activities for a contract value of approximately \$48 Million,” which required “Weeks Marine to dredge approximately 334,000 cubic yards of [DM] from a designated area adjacent to the proposed Paulsboro Marine Terminal ship and barge berths.” Under the contract, Weeks Marine was to “amend approximately 86,500 cubic yards of DM that is expected to contain Constituents of Concern (CoC) with Portland cement to bind and stabilize it, thereby creating amended dredge material or ADM.” The contract further “mandate[d] that any ADM be transported to the Gloucester County Solid Waste Complex (GCSWC) and be disposed in the landfill [as] . . . solid waste” (*Id.* ¶¶ 9-11).

In April, 2011, the processing method shifted from upland processing (where DM is obtained, then treated off-site) to in-barge processing (in which DM is processed on site in the barge itself). On April 7, 2011, Weeks Marine’s engineer, Schnabel Engineering, drafted the processing diagrams for Weeks Marine’s Dredged Material Processing Facility (“DMPF”) to be used at Paulsboro to amend the 86,000 CY of DM. (Pl. Moving Br. Ex. 6, the “Processing Details Drawing”). On April 26, 2011, Weeks Marine requested that GCIA ask the NJDEP to modify its permits for the Paulsboro Project, (MTD OA 53:1-3), “from on-site *upland* dredge

“[i]f a contractor performs the work for you, both you and the contractor are responsible for assuring the work is done in conformance with the conditions and limitations of this permit,” which included that “86,000 cubic yards of fine-grained material which exceeds the NJDEP Non-Residential Soil Remediation Standards as depicted on the approved plan, shall be disposed of at the Gloucester County Solid Waste Complex Landfill . . . in Gloucester County, New Jersey.” (Pl. Moving Br. Ex. 5 at *1, ¶ 11, the “January 28, 2011 Department of the Army Permit”).

material processing to *in-barge* processing of dredge material. The dredge material quantity (i.e., 86,000 cubic yards) . . . [of] fine grained material . . . that exceed the NJDEP Non-Residential Soil Remediation Standards[] and all other dredge material processing permit conditions will remain per the approved permits.” (Pl. Moving Br. Ex. 6, Letter re: Request to Modify Permits, from Marlin Peterson, Director of Port Development, GCIA, to Suzanne U. Dietrick, Chief, Office of Dredging and Sediment Technology, NJDEP, April 26, 2011, the “GCIA’s April 26, 2011 Modification Request”). On July 6, 2011, the NJDEP approved the modification:

The formerly approved upland processing facility (UPF) is to be replaced by a temporary mobile in-water dredged material processing facility (DMPF) to be moored in the Delaware River within the marine terminal facility footprint. Said processing facility will treat the same materials and quantities as authorized by the former AUD including an in-barge process blending Portland cement with dredged material (DM). All processing will be located on a deck barge moored with spuds. Scows containing DM will remain at the dredging locus overnight for initial dewatering then brought alongside the processing barge. After screening the DM will be stabilized via blending with the cement additive.

(Pl. Moving Br. Ex 8, Letter re: Modification of Acceptable Use Determination (AUD), from David Q. Risilia, Office of Dredging and Sediment Technology Site Remediation Program of the NJDEP, to Mr. Joseph Balzano, South Jersey Port Corporation, July 6, 2011, the “NJDEP’s July 6, 2011 Modification Confirmation”). On August 5, 2011, Weeks Marine began the dredging project using an in-barge processing method, (Dickerson Opp. Decl. ¶ 13), and they anticipate completing the project by January 2012.

C. The Allegedly Infringed ‘731 Patent

The ‘731 patent—“Method for Treatment of Dredged materials to Form a Structural Fill”—was issued on September 25, 2001. (Pl. Moving Br. Ex 1). Generally, the patent protects:

A method for treating materials dredged from a waterway, such as a harbor or channel, and forming a mixture suitable for beneficial re-use as structural fill.

The [DM] may be placed in a treatment vessel which transports the [DM] through a plurality of processing stages including a dewatering stage, a debris removal stage, a fixation, stabilization and solidification stage, a curing stage, and an offloading stage. The fixation, stabilization and solidification stage involves adding a cement type additive such as Portland Cement along with other additives which stabilize the [DM] by chemical fixation and solidification to form the structural fill.

(Ex. 1, Abstract to the '731 Patent). The "Summary of the Invention" states:

The present invention disclosed herein comprises a process and the associated apparatus for treatment of dredged materials that is cost effective on large scale, that is environmentally responsible and that produces a mixture that is suitable for beneficial re-use as a structural file [sic].

(Ex. 1, Summary of the Invention of the '731 Patent). Claim One of the '731 patent reads:

A method for producing a structural fill material comprising the steps of:

obtaining a dredged material;

depositing the dredged material into a containment receptacle;

removing free water from the dredged material and the containment receptacle;

creating an additive slurry in a mixing container;

pumping the additive slurry from the mixing container to a mixing assembly disposed within the containment receptacle;

mixing the additive slurry into the dredged material to form a substantially homogenous mixture; and,

curing the substantially homogenous mixture in the containment receptacle, thereby producing a structural fill material and reducing particulate emissions.

(Ex. 1, Claim One of the '731 Patent).

II. LEGAL STANDARD

Preliminary injunctions are extraordinary remedies that are not routinely granted. *Titan Tire Corp. v. Case New Holland, Inc.*, 566 F.3d 1372, 1375 (Fed. Cir. 2009). The decision to grant a preliminary injunction is within the sound discretion of this Court. *Abbott Labs. v. Andrx*

Pharms., Inc., 452 F.3d 1331, 1334 (Fed. Cir. 2006) (citation omitted). In determining whether the extraordinary remedy of injunctive relief should issue, the Court examines four factors: (1) whether movant has shown a reasonable likelihood of success on the merits; (2) whether movant has shown irreparable harm if an injunction is not granted; (3) whether the balance of hardships tips in movant's favor; and (4) whether and how the injunction impacts the public interest. *See Altana Pharm. AG v. Teva Pharms. USA, Inc.*, 566 F.3d 999, 1005 (Fed. Cir. 2009) (citation omitted).

The movant bears the burden of demonstrating that a preliminary injunction should be granted. *See id.* Although the Court must generally weigh all four of these factors, “a movant cannot be granted a preliminary injunction unless it established both of the first two factors, *i.e.*, likelihood of success on the merits and irreparable harm.” *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1350 (Fed. Cir. 2001) (citation omitted).

III. DISCUSSION

Below, the Court analyzes and balances all four of the preliminary injunction factors. First, the Court addresses irreparable harm—the factor that the Court considers to be most compelling in this case—finding that Plaintiffs have failed to show that they will be irreparably harmed if the preliminary injunction is denied. Second, the Court analyzes likelihood of success on the merits, finding that there is a substantial question as to whether Weeks Marine's process infringes the seventh step of Claim One. Third, the court analyzes the balance of hardships, finding that the factor does not balance in favor of Plaintiffs. Finally, the Court analyzes the public interest, finding that the public's interest in the completion of a major public works project at the Paulsboro site is substantial.

A. Irreparable Harm

Plaintiffs must provide a clear showing that in the absence of injunctive relief they will suffer irreparable harm. *Nutrition 21 v. United States*, 930 F.2d 867, 870-71 (Fed. Cir. 1991). “Irreparable harm must be established as a separate element, independent of any showing of likelihood of success; irreparable harm can no longer be presumed.” *King Pharms., Inc. v. Sandoz, Inc.*, No. 08-5974, 2010 U.S. Dist. LEXIS 48385, at *13 (D.N.J. May 17, 2010) (citing *Winter v. Natural Resources Def. Council, Inc.*, 555 U.S. 7, 21-23 (2008) and *eBay Inc. v. MercExchange L.L.C.*, 547 U.S. 388, 393-94 (2006)); *Robert Bosch LLC v. Pylon Mfg. Corp.*, 659 F.3d 1142, 1148-49 (Fed. Cir. 2011). “[N]either the difficulty of calculating losses in market share, nor speculation that such losses might occur, amount to proof of special circumstances justifying the extraordinary relief of an injunction prior to trial.” *Nutrition 21*, 930 F.2d at 871. Additionally, quantifiable damages militate against the issuance of an injunction. *See, e.g., Sanofi-Aventis Deutschland GmbH v. Glenmark Pharms. Inc., USA*, No. 07-5855, 2010 U.S. Dist. LEXIS 56019 (D.N.J. June 7, 2010); *Novartis Corp. v. Teva Pharms. USA, Inc.*, No. 04-4473, 2007 U.S. Dist. LEXIS 42163, at *84-88 (D.N.J. June 11, 2007) (finding that plaintiff failed to establish irreparable harm because damages were calculable, defendant had the ability to pay damages, and the possibility of lost market share and price erosion did not constitute irreparable harm).

To meet their burden, Plaintiffs generally argue that if Defendants are not enjoined, Plaintiffs will suffer immediate and irreparable harm in the following ways: (1) they will be unable to recoup their investment in the GATX site; (2) they will be unable to maximize their investment in the GATX site and execute their business plan to become a lowest-cost-provider, one-stop shop for dredging, processing, and disposal; (3) they will lose customers and contracts

resulting in unquantifiable price erosion and lost market share; (4) they will be unable to prevent others from practicing the '731 patent; and (5) they will lose their reputation and goodwill. (*See* Pl. Moving Br. at 16-19). The Court considers—yet rejects—each theory below.

First, as to their real estate investment, Plaintiffs argue that they will suffer irreparable harm if Defendants are not enjoined because Plaintiffs will be unable to recoup their substantial expenditures related to obtaining the GATX site. (Pl. Moving Br. at 17). Plaintiffs have invested millions of dollars in the “anticipated purchase of real estate in Staten Island” for brownfield remediation, and they have worked to secure the necessary permits to treat DM using the '731 patent's methodology for in-barge treatment, processing, and disposal of DM at the GATX site for redevelopment purposes. (Pl. Moving Br. at 5 (citing Declaration of Rick Redle in Support of Plaintiffs' Moving Brief, the “Redle Moving Decl.” ¶ 7)). However, expenditures related to real estate acquisition—presumably, tracked by the company's accounting office—are quantifiable and compensable with money damages, and therefore any injuries related to failure to recoup investments on the GATX site do not constitute irreparable harm for preliminary injunction purposes. *See, e.g., Sanofi-Aventis*, 2010 U.S. Dist. LEXIS 56019, at *47 (finding no irreparable harm and denying the preliminary injunction where lost value could be determined by a “quantifiable measure for ascertaining economic damages”).

Second, as to Plaintiffs' inability to maximize their investment in the GATX site, Plaintiffs argue that the non-issuance of a preliminary injunction would thwart their aspirations of becoming a one-stop shop for dredging, processing, and disposal. Plaintiffs' aspiration of becoming a “one-stop shop,” would, in turn, enable them to become the lowest-cost provider of dredging and disposal services because they would own the disposal site and could offer highly competitive rates. (Pl. Moving Br. at 17). But “speculation that losses might occur” does not

amount to the extraordinary circumstances warranting a preliminary injunction. *Winter*, 555 U.S. at 22 (“[A] preliminary injunction will not be issued simply to prevent the possibility of some remote future injury. Issuing a preliminary injunction based only on a possibility of irreparable harm is inconsistent with our characterization of injunctive relief as an extraordinary remedy that may only be awarded upon a clear showing that the plaintiff is entitled to such relief.”) (quotations omitted); *see also Nutrition 21*, 930 F.2d at 871 (finding that loss of potential sales based on a likely increase in demand for the patented product did not constitute irreparable harm). The argument rejected in *Nutrition 21* is analogous to Plaintiffs’ argument here. In this case, Plaintiffs argue that other dredging and processing companies pay high rates for disposal because they do not own the disposal sites. If, however, Plaintiffs succeed in acquiring the GATX disposal site, their disposal costs will decrease relative to their competitors, enabling Plaintiffs to charge customers less for disposal at GATX, thereby increasing demand for Plaintiffs’ services. Plaintiffs argue that if the Court does not issue a preliminary injunction, this business plan will not come to fruition.

The Court rejects this theory for two reasons. First, Plaintiffs’ ownership of the GATX site is itself speculative because they do not currently own the site. (Oral Argument on Preliminary Injunction, the “PI OA” Tr. 243:5-7). Second, there is no evidence before the Court demonstrating that demand for their services is increasing *right now*, and that the non-issuance of an injunction would harm them immediately, as the law requires. *See, e.g., Abbott Labs.*, 452 F.3d at 1334 (requiring a showing of “*immediate* irreparable harm”) (emphasis added) (citation omitted); *Quad/Tech, Inc. v. Q.I. Press Controls B.V.*, 701 F. Supp. 2d 644, 655 (E.D. Pa. 2010) (“In order to make this showing [of irreparable harm], the movant must clearly show ‘immediate irreparable harm,’ rather than a risk of harm.” (quoting *Campbell Soup Co. v. ConAgra, Inc.*, 977

F.2d 86, 92 (3d Cir. 1992)). Instead of demonstrating that demand for their services is currently increasing, and therefore that Plaintiffs are susceptible to immediate irreparable harm, they merely set forth an aspirational business plan that they hope will increase demand in the future, and such speculation does not rise to the level warranting the extraordinary remedy of a preliminary injunction. *See, e.g., Eli Lilly & Co. v. Am. Cyanamid Co.*, 82 F.3d 1568, 1578 (Fed. Cir. 1996) (rejecting the argument that “lost opportunity” rises to a level warranting the “extraordinary” remedy of a preliminary injunction); *Altana Pharm. AG v. Teva Pharms.*, 532 F. Supp. 2d 666, 682 (D.N.J. 2007) (denying preliminary injunction and accepting defendants’ argument that “loss of revenue, price erosion, decrease in market share, [and] loss of research opportunities . . . are speculative and thus, not cognizable harms”).

Third, as to lost customers, contracts, market share, and price erosion, Plaintiffs argue that they will lose customers and contracts tied to their exclusive ownership of the ‘731 patent if the injunction is not issued. (Pl. Moving Br. at 18). Defendants argue that the TDM team does not have any market share, customers, or contracts, and therefore they have no market share to lose. (Def. Opp. Br. at 15-16). Plaintiffs reply that they have market share because they have competitively participated in the processing market for over twenty years. (Declaration of Expert Robert E. Boyle in Support of Plaintiffs’ Reply Brief, the “Boyle Reply Decl.” ¶¶ 14 (“UTEX is a competitor [of Weeks Marine] in the processing market because it has been in the materials processing, treatment, handling and disposal business since the 1990s.”)). Plaintiffs argue that they have current contracts because “UTEX is under contract with the Port Authority to be the sole recipient of processed dredged materials from the Port of New York and New Jersey District.” (Pl. Reply Br. at 2 Ex. 13; *see also* Boyle Reply Decl. ¶ 15).

The Court agrees with Defendants and rejects Plaintiffs' arguments for two reasons. First, Plaintiffs have not made clear that the named UTEX entity, UTEX Holdings, LLC—as opposed to its operating entity, UTEX Environmental Services, LLC—has competitively participated in the processing market for twenty years. Although, there is no bright line requirement that competitive commercial activity must be shown for purposes of irreparable harm, the Federal Circuit has held that a “[l]ack of commercial activity by the patentee is a significant factor in the calculus.” *High Tech Med. Instrumentation v. New Image Indus.*, 49 F.3d 1551, 1556 (Fed. Cir. 1995). Here, that significant factor weighs against a finding that irreparable harm would befall TDM and UTEX Holdings, LLC following the denial of a preliminary injunction, because the documents before the Court show only that UTEX Environmental Services, LLC has participated competitively in the processing market, and the documents do not show any commercial activity in this market by the named Plaintiffs.⁴ Second, the Court finds that the settlement agreement between Plaintiffs and The Port Authority of New York and New Jersey does not demonstrate that Plaintiffs have contracted with any particular entities for disposal at the GATX site. The settlement agreement only provides: “for UTEX to

⁴ Relatedly, at oral argument, Defendants explained that the potential lost market share of an un-named, affiliated entity is insufficient to establish irreparable harm to the named parties. (PI OA 257:17-258:4); *see, e.g., Poly-Am., L.P. v. GSE Lining Tech., Inc.*, 383 F.3d 1303, 1311 (Fed. Cir. 2004) (“While Poly-America [the patent owner] may have the right to sue under its patents, both as an owner and as a back-licensee, *it can recover only its own lost profits*, not Poly-Flex’s [a sister corporation, lacking an exclusive license.]”) (emphasis added); *Duhn Oil Tool, Inc. v. Cooper Cameron Corp.*, No. 05-1411, 2010 WL 3744820, at *1 (E.D. Cal. Sept. 15, 2010) (“The Plaintiff . . . is precluded from claiming damages on the alleged lost profits of its parent corporation . . . *or any other corporate affiliate . . .*”) (emphasis added). In *Poly-America v. GSE Lining Technology*, Poly-America was the patent holder and named plaintiff in the action, and Poly-Flex was its non-party “sister corporation” and non-exclusive licensee. 383 F.3d at 1310. The court found that lost profits on sales allegedly lost by Poly-Flex based on defendant’s infringing sales of landfill liners were not attributable to Poly-America, the patent holder, because corporate entities “may not enjoy the advantages of their separate corporate structure and, at the same time, avoid the consequential limitations of that structure—in this case, the inability of the patent holder to claim the lost profits of its non-exclusive licensee.” *Id.* at 1311. Here, TDM, the patent holder, and UTEX Holdings, LLC, TDM’s exclusive licensee, attempt to attribute to themselves the potential lost market share of UTEX Environmental Services, LLC, a non-party. But named Plaintiffs cannot claim the benefits of their separate corporate identities for some reasons—and the Court does not speculate as to what those reasons are in this case—without accepting the burdens for other reasons—namely, the inability to claim for itself the potential lost market share of a non-party affiliate for purposes of establishing irreparable harm.

establish the UTEX Facility and for The Port Authority to use exclusively the UTEX Facility for the acceptance, unloading and placement for beneficial use of dredged materials for *any contracts let by the Port Authority.*” (Pl. Reply Br. Ex. 13, Settlement Agreement between UTEX Holdings, TDM America, LLC, and The Port Authority of New York and New Jersey, July 17, 2009, at 1). But Plaintiffs have not submitted any particular contracts “let by the Port Authority” under which companies will use the GATX cite to beneficially reuse DM, and therefore it is not clear to the Court which customers, if any, the named Plaintiffs could lose. Even if Plaintiffs were to submit such contracts to the Court, presumably each would contain a value from which to calculate quantifiable losses, and quantifiability weighs against issuing a preliminary injunction. *See, e.g., Automated Merch. Sys. v. Crane Co.*, 357 F. App’x 297, 300-01 (Fed. Cir. 2009) (“[L]ost sales standing alone are insufficient to prove irreparable harm; if they were, irreparable harm would be found in every case involving a ‘manufacturer/patentee, regardless of circumstances.’” (citing *Abbott Labs.*, 452 F.3d at 1348)); *Sanofi-Aventis Deutschland GmbH v. Glenmark Pharms. Inc., USA*, 07-5855, 2011 U.S. Dist. LEXIS 112507, at *27 (D.N.J. Sept. 30, 2011) (“‘[L]ost sales standing alone are insufficient to prove irreparable harm’ because they are presumed compensable through money damages.”) (citation omitted).⁵

⁵ In support of their price erosion arguments, Plaintiffs cite cases from the pharmaceutical patent context in which the Abbreviated New Drug Application (ANDA) process governs the entry of a generic drug into a market otherwise monopolized by the innovator (*i.e.*, brand name) drug. *See Hoffman-La Roche Inc. v. Cobalt Pharms., Inc.*, No. 07-4539, 2010 WL 4687839, at *13 (D.N.J. Nov. 10, 2010); *Everett Labs., Inc. v. Breckenridge Pharm., Inc.*, 573 F. Supp. 2d 855, 861-62 (D.N.J. 2008). In such cases, the argument goes, if generics are permitted to enter, the market becomes fragmented, and the innovator drug’s price erodes. Even where the generic is enjoined at a later time, and forced to exit the market, the innovator drug’s price never returns, causing irreparable and unquantifiable price reduction to the innovator drug. But this case is different from an ANDA case in which the patent-holding innovator drug is the only player in the relevant market. Here, in contrast, Plaintiffs seek exclusivity in the materials processing market—the relevant market as Plaintiffs themselves have defined it. By Plaintiffs’ own admission, other companies already compete in this market. (*See Boyle Reply Decl.* ¶ 13 (noting that, in addition to Plaintiffs, the processing market includes UTEX Environmental, LLC, Clean Earth Dredging Technologies, Inc., and Donjon Marine, Inc.). Therefore the ANDA concern—that another company will invade the space of what was previously held by *only* the patent-holder—is absent here, and the Court finds inapplicable the cases used by Plaintiffs to support its competition invasion theory.

Fourth, as to losing the ability to prevent others from practicing the ‘731 patent, Plaintiffs argue that without the issuance of a preliminary injunction, it would be cheaper for potential infringers to risk litigation than to forego a lucrative contract involving an infringing process. Because Plaintiffs would be unable to prevent infringement, they would be unable to enforce the patent at all. (Pl. Moving Br. at 19). Defendants argue that Plaintiffs’ cost-benefit analysis is flawed because a large contract like Paulsboro (valued at \$48 million) might have a significantly lower profit margin (in the hundreds of thousands), and that reduced value compared to the cost of litigation (estimated by the parties at \$1 or \$2 million), incentivizes non-infringement. Therefore the threat of litigation *would* deter would-be infringers. (PI OA Tr. 269:2-14). They also argue that any potential harm to Plaintiffs would be wholly compensable with money damages—evidenced by their offer to Weeks Marine of a licensing royalty of \$602,000—and that “in the event a preliminary injunction is denied now and then TDM somehow later prevails at trial on the merits, Weeks Marine has the means to pay any damages measured by a reasonable royalty.” (Def. Opp. Br. at 2).

The Court interprets Plaintiffs’ argument as one of deterrence, *i.e.*, the million-dollar cost of litigation would not deter processing companies from entering into *multi*-million dollar contracts that potentially infringe. But Plaintiffs fail to explain how damages or even a permanent injunction would not similarly deter would-be infringers; that is, Plaintiffs do not articulate why *only* the extraordinary remedy of a preliminary injunction would have a deterrence effect. Indeed, a would-be infringer’s cost-benefit analysis would not simply compare the cost of litigation to the value of a lucrative contract. Instead, if damages or a permanent injunction were later awarded in this case, potential infringers would need to compare the cost of litigation *plus* the cost of damages (or a permanent injunction) to the profit margin of the

proposed contract. Under this analysis, the cost of litigation could greatly exceed the profit margin, deterring would-be infringers. (*See* Def. Moving Br. at 2 (noting that Weeks Marine has the means to pay damages)). Additionally, Weeks Marine’s ability to pay damages weighs against a finding of irreparable harm. *See, e.g., Nutrition 21*, 930 F.2d at 871 (denying plaintiff’s request for a preliminary injunction, in part, because defendant “is acknowledged to be a large and financially responsible company which would be answerable in damages”); *Boehringer Ingelheim Animal Health v. Schering-Plough Corp.*, 984 F. Supp. 239, 263 (D.N.J. 1997) (“Here, Schering is a major drug company and will be able to compensate Boehringer for any loss. To prove irreparable harm, Boehringer must provide some ‘reasoned analysis’ for why monetary damages would be insignificant and it has not done so.”) (citing *Nutrition 21*, 930 F.2d at 871). Finally, the Court finds that Plaintiffs’ offer to Weeks Marine of a \$602,000 licensing royalty supports the view that damages in this case are quantifiable. *Accumed LLC v. Stryker Corp.*, 551 F.3d 1323, 1328 (Fed. Cir. 2008) (“[T]he weight accorded to the prior licenses falls squarely within the discretion of the Court.”).⁶

Fifth, as to suffering a loss of reputation and goodwill, Plaintiffs argue that their reputational loss in the niche market for processing and disposal of DM is not quantifiable, and their goodwill is in jeopardy because if Defendants are not enjoined, Plaintiffs’ current clients and business partners will “be forced to reconsider the incentives they had for entering into a

⁶ The Court notes that the Federal Circuit has upheld preliminary and permanent injunctions where monetary damages would not suffice to make the patentee whole “because the principal value of a patent is its statutory right to exclude.” *Hybritech Inc. v. Abbott Labs.*, 849 F.2d 1446, 1456 (Fed. Cir. 1988); *see also Accumed LLC*, 551 F.3d at 1328 (“While the fact that a patentee has previously chosen to license the patent may indicate that a reasonable royalty does compensate for an infringement, that is but one factor for the district court to consider.”). In *Hybritech*, the court found, *inter alia*, that the patent’s field of antibody test kit manufacturing was new, that the antibody testing market changed quickly, that there were a large number of market participants, and therefore by the time the trial was over, the rapidly moving technological market might have bypassed the patent. The instant case, however, is distinguishable. Here, the patented in-barge dredging process is not new. In fact, Plaintiffs argue that they have been involved in the in-barge processing of DM since the 1990s. Additionally, here, it is unlikely that the dredging industry will bypass the ‘731 patent before litigation is complete. Therefore, the Court finds that *Accumed* and *Hybritech* are distinguishable from the present case.

business relationship with TDM based on the ‘731 patent.” (Pl. Moving Br. at 19). The Court finds Defendants’ argument relating to loss of reputation and goodwill to be unpersuasive.⁷ Because money damages or a permanent injunction would deter Plaintiffs’ competitors from offering infringing services, customers interested in practicing the ‘731 patent would have to use the services offered by Plaintiffs. Additionally, if the Court eventually finds that Plaintiffs have prevailed on the merits of the ‘731 patent, then past, present, and future customers would not suffer confusion as to which company is able to offer services under the patent.

Finally, the Court finds that Plaintiffs’ delay in bringing their motion weighs against issuing the preliminary injunction. *See, e.g., High Tech Med. Instr.*, 49 F.3d at 1557 (“[D]elay in seeking a remedy is an important factor bearing on the need for a preliminary injunction.”) (citation omitted); *Graceway Pharms., LLC v. Perrigo Co.*, 697 F. Supp. 2d 600, 606-07 (D.N.J. 2010) (“[T]he number of days involved, standing alone, is not determinative, although an unexplained three to four week delay, as here, hardly counts in Plaintiffs’ favor.”); *Laminations, Inc. v. Roma Direct Mktg. LLC*, 516 F. Supp. 2d 404, 420 (M.D. Pa. 2007) (waiting “a number of months after procuring a copy of the accused device also belies [plaintiff’s] claim of irreparable injury”). Here, Plaintiffs and Defendants had been in contact since at least July 2010 regarding in-barge dredging processes. (*See* Kollasch Moving Decl. ¶¶ 1, 11 (claiming that Weeks Marine had been working with Mr. Luke Kollasch, sole proprietor of General Development West, consultant for UTEX, regarding in-barge processing since July 2010); Dickerson Opp. Decl. ¶ 15-17 (claiming that the parties had been in touch regarding in-barge dredging since May 2010, when Mr. Kollasch offered to provide information regarding dredging machinery to Mr. Eric D.

⁷ Plaintiff cites *Bio-Technology General Corp. v. Genentech, Inc.* for the proposition that lost revenue and goodwill are sufficient for a finding of irreparable harm. This reliance is error because in that case, unlike here, the court found that “Genentech was entitled to a presumption of irreparable harm because Genentech made a strong showing of infringement and validity.” 80 F.3d 1553, 1555-56 (Fed. Cir. 1996). In this case, Plaintiff has failed to demonstrate a likelihood of success as to invalidity and no presumption exists.

Dickerson, Northeast Area Business Manager for the Dredging Division at Weeks Marine, who was in charge of Weeks Marine's plans for a mobile DM processing facility)).⁸

At some point, however, discussions broke down and Plaintiffs chose to pursue a licensing fee instead of quickly moving for a preliminary injunction to protect their patent rights. On at least two separate occasions, Plaintiffs decided not to move for a preliminary injunction. First, letters sent to Weeks Marine from TDM's counsel on May 5, 2011, June 14, 2011, and June 17, 2011 demonstrate Plaintiffs' knowledge that Weeks Marine's proposed process at the Paulsboro site would infringe the '731 patent. (*See Complaint*, D.E. 1 ¶¶ 9-13 (11-3850)). Most notably, Plaintiffs' June 14, 2011 letter stated, "[a] review of the proposed in-barge processing procedure and, specifically, the general operation description provided by Weeks Marine shows that each and every element of certain claims of [the '731 patent] owned by TDM is met." (*Complaint* D.E. 1 Ex. 4). The letter also stated that [u]nless the in-barge process is subject to a license agreement, TDM will have no choice but to enforce its rights and interests in the '731 patent," and that "TDM requires assurance within the next seven days" that the patent would not be infringed or else "it will have no choice but to take legal action." The letter also demonstrated Plaintiffs' knowledge that "this project will commence in less than thirty days." (*Id.*). At this point, when Plaintiffs could have filed the instant motion, they further pursued licensing discussions instead. Second, the filing of Weeks Marine's declaratory judgment action on July 5, 2011 should have alerted Plaintiffs that it was time to exercise their rights under the '731 patent. Instead, Plaintiffs waited until August 10, 2011 to enforce their patent rights and move for a preliminary injunction, (D.E. 14 (11-3850)), which weighs against granting the pending motion.

⁸ On the record before it, the Court is unable to determine whose version is more plausible, but the Court need not decide the issue at this stage, because the Court finds that Plaintiffs were aware of Defendants' intentions to use an in-barge dredging process at least a month before filing the instant motion.

Because Plaintiffs have not persuasively articulated how any of their theories demonstrate immediate, non-speculative, un-quantifiable irreparable harm, and because Plaintiffs delayed the filing of this motion, the Court finds that Plaintiffs have failed under this prong.

B. Likelihood of Success on the Merits

Analysis of the likelihood of success as to infringement requires two steps. *Oakley, Inc. v. Sunglass Hut Int'l*, 316 F.3d 1331, 1339 (Fed. Cir. 2003). At step one, “the court . . . must . . . determine the meaning and the scope of the claims.” *Gillette Co. v. Energizer Holdings, Inc.*, 405 F.3d 1367, 1370 (Fed. Cir. 2005); *Amazon.com*, 239 F.3d at 1351. At step two, the Court compares the construed claims to the allegedly infringing product or method. *Hilgraeve Corp. v. Symantec Corp.*, 265 F.3d 1336, 1341 (Fed. Cir. 2001) (citations omitted).

“[B]ecause of the extraordinary nature of the relief, the *patentee* carries the burden of showing likelihood of success on the merits with respect to the patent’s . . . infringement.” *Nutrition 21*, 930 F.2d at 869. Thus, TDM and UTEX must demonstrate that they will likely prove infringement, and that they will likely withstand Defendants’ challenges to the alleged infringement of the patent. *Titan Tire Corp.*, 566 F.3d at 1376. A preliminary injunction should not issue if Defendants are able to raise a “substantial question” regarding the infringement of any step of the patent. *AstraZeneca LP v. Apotex, Inc.*, 633 F.3d 1042, 1050 (Fed. Cir. 2011).

1. Infringement Step One: Claim Construction

In construing claims, the analytical focus must begin and remain centered on the language of the claim itself. *Gillette Co.*, 405 F.3d at 1370; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005). However, where a patent’s claims have been construed in a prior litigation, a court may defer to the prior claim construction. *See, e.g., Inpro II Licensing, S.A.R.L. v. T-Mobile USA, Inc.*, 450 F.3d 1350, 1359 (Fed. Cir. 2006) (“The court may defer to a

prior claim construction, though it is not necessarily bound by it.”) (citing *Texas Instruments, Inc. v. Linear Techs. Corp.*, 182 F. Supp. 2d 580 (E.D. Tex. 2002)); *KX Indus., L.P. v. PUR Water Purification Prods., Inc.*, 108 F. Supp. 2d 380, 387 (D. Del. 2000) (“[T]o the extent the parties do not raise new arguments, the court will defer to its previous construction of the claims.”). Where a party seeks preliminary injunctive relief, courts “may engage in rolling claim construction, in which the court revisits and alters its interpretation of the claim terms as its understanding of the technology evolves.” *Pfizer, Inc. v. Teva Pharms., USA, Inc.*, 429 F.3d 1364, 1377 (Fed. Cir. 2005) (quotations omitted); *Oakley*, 316 F.3d at 1345 n.3 (“[A] district court can issue tentative or rolling claim constructions when faced with construing highly technical claim language on an expedited basis, such as in a preliminary injunction proceeding”) (quotations omitted).

In a separate case, TDM sued its competitors for processing DM under contracts for the U.S. Army Corps of Engineers for infringement of patents including ‘731. (Redle Moving Decl. ¶ 10). On February 20, 2009, the United States Court of Federal Claims issued a Markman claim construction opinion and order construing the elements of Claim One of the ‘731 patent. *TDM America, LLC v. United States and Donjon Marine Co., Inc. (TDM Markman)*, No. 06-472, 85 Fed. Cl. 774 (Feb. 20, 2009). Subject to reserving their right to supplement claim construction as the case progresses, the parties do not dispute the court’s findings in *TDM Markman*. (See Pl. Moving Br. at 9-11; Def. Opp. Br. at 20 & n.2; PI OA Tr. 7:8-9, 22). Because the Court finds the claim construction analysis of the ‘731 patent by the United States Court of Federal Claims in *TDM Markman* to be thoughtful and thorough, and because both parties rely on that court’s claim construction for purposes of this preliminary injunction, the Court adopts the claim

construction in *TDM Markman*—on a tentative basis—for purposes of this preliminary injunction.

Preamble: In its 2009 construction of the ‘731 patent, the court found that the preamble—“[a] method for producing a structural fill material comprising the steps of . . .”—did not limit the terms of the ‘731 patent. *TDM Markman*, 85 Fed. Cl. at 800.

Step 1 - Obtaining a Dredged Material: The court construed “dredged material” as something that “may include material removed from a subaqueous location such as a waterway but is not limited to material from a subaqueous source.” *Id.*

Step 2 - Depositing the Dredged Material into a Containment Receptacle: The court found that a “containment receptacle” is “an apparatus, device, or structure, such as a barge, scow, or pit” that “is separate and distinct from the mixing container.” *Id.* at 801.

Step 3 - Removing Free Water from the Dredged Material and the Containment Receptacle: The court found that this step means “the removal of water that is free from dredged material.” *Id.* at 801-02.

Step 4 - Creating an Additive Slurry in a Mixing Container: “An ‘additive’ may comprise a cement-based additive [such as] Portland cement. . . .” *Id.* at 802. An “‘additive slurry’ must contain a watery mixture or liquid of some sort.” *Id.* A “mixing container” is “an apparatus, device, or structure that is separate and apart from the containment receptacle, wherein the additive(s) and water are held, while uniformly mixed to create the additive slurry.” *Id.* at 803 (citation omitted). “Thus, the invention requires three separate and distinct devices: [1] a mixing container, [2] a mixing assembly, and [3] a containment receptacle.” *Id.* at 804.

Step 5 - Pumping the Additive Slurry from the Mixing Container to a Mixing Assembly Disposed Within the Containment Receptacle: “[T]he pumping action must occur

via a pump and not some other device” such as a pneumatic transfer or a conveyor. *Id.* at 805. Additionally, “the slurry must be pumped directly to the mixing assembly,” *id.* at 806, which is “a device for mixing the additive slurry into the dredged materials, the mixing assembly positioned within the containment receptacle.” *Id.* at 807. The court clarified that the claim “requires the mixing assembly to sit *inside* the containment receptacle.” *Id.* (emphasis added).

Step 6 - Mixing the Additive Slurry into the Dredged Material to Form a Substantially Homogenous Mixture: At this step, the additive slurry is mixed into the DM to form a “substantially homogenous mixture,” which is “a mixture in which additive slurry is uniformly distributed throughout the dredged material.” *Id.* at 807.

Step 7 - Curing the Substantially Homogenous Mixture in the Containment Receptacle, Thereby Producing a Structural Fill Material and Reducing Particulate Emissions: “Curing” means “simply allowing enough time for the mixture to solidify and stabilize” as opposed to allowing enough time for chemical fixation, stabilization, *and* solidification of reactions. *Id.* at 808. “‘Structural fill material’ is not limited to a soil-like material suitable for beneficial reuse. . . . [and includes] a myriad of uses for structural fill material.” *Id.* at 809. In its claim construction, the court accepted Plaintiff’s proposed construction of the term “structural fill material,” which Plaintiff asserted “may be used as: (1) a cap for a landfill; (2) the site for the construction of a building; (3) paving material for parking lots, airfield construction, road base or other Department of Transportation Projects; (4) material suitable for beneficial reuse as an engineered structural fill material; (5) a liner protective cover; (6) a daily cover or final cover over a landfill; (7) strip mine reclamation; (8) a cap for Brownfield property or in another environmental remediation plan; (9) beach nourishment; (10)

habitat development projects; (11) other beneficial uses; or (12) other uses requiring the use of structural fill. *Id.* at 809.

2. Infringement Step Two: Comparison of Each Step of the Construed Claim to the Allegedly Infringing Method

Step two requires a determination of whether every step of the '731 patent is found in the accused method. *See Oakley*, 316 F.3d at 1339. Claim One of the '731 patent consists of seven steps, but the parties primarily dispute steps four (“creating an additive slurry in a mixing container”) and seven (“curing the substantially homogenous mixture in the containment receptacle, thereby producing a structural fill material and reducing particulate emission”). Below, the Court performs a step-by-step infringement analysis, finding that Defendants’ have raised a substantial question as to step seven.

Step 1 - Obtaining a Dredged Material: Plaintiffs argue that this step is met because “[i]n accordance with the Paulsboro contract and the permits secured in the name of SJPC and GCIA to be performed by Weeks Marine, the port is to be dredged.” (Pl. Moving Br. at 24). Defendants do not meaningfully dispute whether Plaintiffs have demonstrated a likelihood of success as to the infringement of this step. (*See* Def. Opp. Br. at 27-31; PI OA Tr. 10:2). Under SJPC’s October 15, 2010 permit from the NJDEP—by which Weeks Marine is bound—the Paulsboro Project entails, “in-water elements” including, *inter alia*, “1. [d]redg[ing] and dispos[ing] approximately 86,000 CY of fine grain material” (Pl. Moving Br. Ex. 4). Because DM, as construed, “may include material removed from a subaqueous location such as a waterway,” the Court finds that Plaintiff is likely to demonstrate that Weeks Marine’s process meets this step of Claim One.

Step 2 - Depositing the Dredged Material into a Containment Receptacle: Plaintiffs argue that “[a]s described in Weeks Marine’s general operational description, Weeks Marine will

place the dredged material it obtains into barges or dredged scows.” (Pl. Moving Br. at 24). Defendants do not meaningfully dispute that this step is met. (*See* Def. Opp. Br. at 27-31; PI OA 10-11). Under Weeks Marine’s General Operational Description of the Paulsboro Project, Weeks Marine’s dredged material processing facility “includes an in-barge stabilization process that blends Portland cement with dredged material . . . [using] [b]arges (dredge scows) loaded with DM” (Pl. Moving Br. Ex. 6, “General Operational Description”). Because a containment receptacle is an apparatus, device, or structure, such as a barge, scow, or pit that is separate and distinct from the mixing container, the Court finds that Plaintiff is likely to demonstrate that Weeks Marine’s process meets this step of Claim One.

Step 3 - Removing Free Water from the Dredged Material and the Containment Receptacle: Plaintiffs argue that “dredged material obtained from a waterway has a high water content [and] [s]ome water may be separated from the dredged material . . . [which] is often referred to as dewatering.” (Pl. Moving Br. at 25 (citing Kollasch Moving Decl. ¶ 34)). Plaintiffs further contend, “Weeks Marine’s permit for its in-barge stabilization system, the DMPF permit, specifically states that ‘dewatered raw dredged material will be delivered to the facility in scows.’” (*Id.* at 25). Defendants do not seriously challenge that this step is met. (*See* Def. Opp. Br. at 27-31; PI OA Tr. 14:3-4). The Overview of Weeks Marine’s General Operational Description provides: “Weeks’ DMPF concept includes an in-barge stabilization process that blends Portland cement with dredged material (DM) for dewatering and chemical stabilization . . . [and] [b]arges (dredge scows) loaded with DM will remain at the dredging site overnight to allow initial dewatering.” (General Operational Description). The Court therefore finds that Plaintiff is likely to demonstrate that Weeks Marine’s process meets this step.

Step 4 - Creating an Additive Slurry in a Mixing Container: The parties dispute whether Plaintiffs are likely to demonstrate that this step is met, but the Court finds that Plaintiffs have the better argument. As construed, this step means creating a “watery mixture [including] a cement-based additive [such as] Portland cement” in “an apparatus, device, or structure that is separate and apart from the containment receptacle, wherein the additive(s) and water are held, while uniformly mixed.” *TDM Markman*, 85 Fed. Cl. at 802-03. The parties’ disagreement as to whether Weeks Marine’s process meets this step focuses on characterizations of how, where, and when the liquid and cement are mixed (*i.e.*, how, where, and when the slurry is created). Plaintiffs argue that the “mixing auger” in Weeks Marine’s processing drawing is a “mixing container,” because it is a place—separate and apart from the barge—where liquid and cement are combined, and if the auger were not housed in a container, water and cement would fly around. (Pl. Moving Br. at 26-28). Defendants argue that their mixing auger is not a container at all. Instead it is simply an auger that continuously conveys dry cement through a series of spray bars before the mixture is pumped to the barge. Because the mixing auger “continuously processes” cement, it avoids the preparation of significant quantities of pre-mixed slurry. As such, the Weeks Marine process avoids the potential for the slurry to sit around and become unstable before being pumped to the barge, thereby failing to meet the temporal part of the claim construction: “wherein the additive(s) and water are *held, while uniformly mixed.*” (Def. Opp. Br. at 29 (emphasis added) (citing *TDM Markman*, 85 Fed. Cl. at 803)).

The “[s]pecific details of the proposed In-Barge Processing procedure, which were provided by Weeks Marine, are detailed in the . . . General Operational Description [and the] Processing Details Drawing” attached to GCIA’s April 26, 2011 Modification Request. (Pl. Moving Br. Ex. 6). The General Operational Description provides: “[Portland cement] will then

be pneumatically transferred from this storage vessel to an on-board cement mixing and delivery (CMD) system. The CMD process will be a *closed system, designed to substantially reduce fugitive emissions of cement.*” (*Id.* (emphasis added)). Figure 2 in the Processing Details Drawing depicts a “cement/additive mixing and delivery system” where dry cement drops into an apparatus featuring an auger surrounded by a rectangular enclosure. (*See id.*) Once the dry cement drops into the auger, it pushes the cement through a series of spray bars, introducing water to the cement. At oral argument, Defendants provided a video that confirmed for the Court that the auger is covered by solid panels when the system is in operation.⁹ (PI OA Tr. 43:22-23, 55:12-22, 56:13-14).

Therefore, the Court finds that Plaintiffs are likely to demonstrate that this step is met as follows: (1) the spray bars introducing water to cement create a “watery mixture [including] a cement-based additive”; (2) the mixing auger is “an apparatus, device, or structure”; (3) the mixing auger is “separate and apart from the containment receptacle” because the auger apparatus is on the deck of the barge instead of being within the DM-filled depth of the barge itself; (4) the auger apparatus is a place “wherein the additive(s) and water are held, while uniformly mixed” because, while the apparatus is in operation, its top is covered while cement is sprayed with water from spray bars as the mixture is pushed along the length of the auger.¹⁰ Therefore, the court finds that Defendants have failed to raise a substantial question as to Plaintiffs’ likelihood of success on this step because Figure 2 of Defendants’ Processing Details

⁹ Initially, Defendants showed a portion of the video where panels had been removed during cleaning, after regular operation had ceased. (PI OA Tr. 43:10-18). Later, Plaintiffs pointed out that the panels were in place—enclosing the auger assembly—when in operation.

¹⁰ Defendants also argue that Weeks Marine’s process does not meet the temporal requirement set forth in *TDM Markman*, that the slurry be “held” in the mixing container “while uniformly mixed.” (PI OA Tr. 46:1-6). The Court disagrees, finding that the length of the auger assembly—ten to twelve feet (PI OA Tr. 45:6-7)—necessarily requires the slurry to be “held” for *some* amount of time while the slurry is uniformly mixed, which is all the claim construction requires.

Drawing shows that the auger is enclosed by a container that holds the slurry for long enough to satisfy the claim construction.

Step 5 - Pumping the Additive Slurry from the Mixing Container to a Mixing Assembly Disposed Within the Containment Receptacle: Plaintiffs argue that the ‘731 patent and Weeks Marine’s Processing Diagram depict two “identical processes” with respect to the step of pumping. (Pl. Moving Br. at 29). Weeks Marine does not seriously challenge that this step is met. (*See* Def. Opp. Br. at 27-31; PI OA Tr. 58:13-15). Both Figure 2 of the ‘731 patent, (Pl. Moving Br. Ex. 1), and Weeks Marine’s Processing Details Drawing attached to GCIA’s April 26, 2011 Modification Request, (Pl. Moving Br. Ex. 6), depict a process in which the slurry is pumped from a mixing container—where the slurry is created—through supply lines to a mixing assembly disposed in the barge. In the ‘731 patent, the pump is depicted in Figure 2 at 70 where material is pumped from the mixing container to the barge through supply line 68. In Weeks Marine’s Processing Diagram, the auger moves the slurry through the mixing container to a pump where the slurry moves to an excavator with a mixing head located on the barge. Because this step as construed, is a “pumping action [that] must occur via a pump” whereby “the slurry must be pumped directly to the mixing assembly, [*i.e.*,] a device for mixing the additive slurry into the dredged materials, the mixing assembly positioned within the containment receptacle,” the Court finds that Plaintiff is likely to demonstrate that Weeks Marine’s process meets this step of Claim One. *See TDM Markman*, 85 Fed. Cl. at 805-06.

Step 6 - Mixing the Additive Slurry into the Dredged Material to Form a Substantially Homogenous Mixture: Plaintiffs argue that this step is met in Weeks Marine’s General Operational Description: “The point on the mixing head where Portland cement is added to the DM will remain submerged in unprocessed DM to prevent spilling, splashing or blowing

of material. The amount of cement added will be equivalent to approximately 8% of the total volume of DM.” (Pl. Moving Br. at 29-30 (quoting Pl. Moving Br. Ex. 6, General Operation Description—DM Stabilization)). Defendants do not meaningfully dispute that this step is met, (Def. Opp. Br. at 27-31; PI OA Tr. 61:10), and the Court finds that this step as construed occurs when Weeks Marine pumps the slurry into the barge containing DM.

Step 7 – Curing the Substantially Homogenous Mixture in the Containment Receptacle, Thereby Producing a Structural Fill Material and Reducing Particulate Emissions: The parties dispute whether this step is met. First, the parties dispute whether Weeks Marine’s process contains the step of “curing,” and second, whether Weeks Marine’s process results in material fit to be used as “structural fill.”

As to curing, Plaintiffs argue that Weeks Marine cures when “stabilized dredged material remains in the dredge scow for 24 hours either at the processing barge, the dredging location, or at the off-loading barge.” (Pl. Moving Br. at 30). Defendants argue that they do not cure because curing as construed has two parts, and while in the barge, their DM does neither. As to stabilization, “Weeks Marine’s process does not purport to allow its treated DM to . . . stabilize, as this would defeat the purpose of merely disposing of it as waste . . . as required under its contract with the GCIA.” (Def. Opp. Br. at 30 (citing Dickerson Decl. ¶ 9)). As to solidification, Weeks Marine argues that solidification “would actually work against us because then when we did get to the landfill we would have to get heavy equipment and rake it out and scoop it out We are just putting it into the landfill as waste.” (PI OA TR 72:25, 73:1-5).

The Court finds that Weeks Marine’s General Operational Description does not explicitly require the DM to stabilize and solidify *in the barge* as required under the claim construction. In fact, Weeks Marine’s General Operational Description explains that it is not until later, when the

DM has been taken *out* of the barge and put into the “temporary storage area,” that the material “will be allowed to *cure*,” before loading it into trucks for transport and placement at approved upland management facilities. (General Operational Description) (emphasis added). Because the curing takes place after the DM is removed from the barge and put into the temporary storage area, there is a substantial question as to whether curing takes place in the barge as required by the claim construction. Additionally, although it is true that the DM is held in the barge for twenty-four hours, there is a substantial question as to what exactly takes place during that time (*i.e.*, whether both parts of step seven, stabilization and solidification, occur). In fact, it appears unlikely that the DM solidifies during the twenty-four hour period, because that would make it more difficult for Weeks Marine to remove the DM from the barge to be dumped at the Gloucester landfill. Therefore, the Court finds that Defendants have raised a substantial question as to whether Plaintiffs will be able to demonstrate that Weeks Marine’s process meets the step of curing in the containment receptacle.

As to “structural fill,” Plaintiffs argue that the goal of Weeks Marine’s twenty-four hour holding period is to “minimize[] particulate emissions,” so that the DM is fit for use as structural fill. (Pl. Moving Br. at 30). Defendants argue that their process does not meet the “structural fill material” requirement because the relevant permits and contracts require Weeks Marine to dispose of the DM as waste, which is the antithesis of the types of uses enumerated in *TDM Markman*. (See Def. Opp. Br. at 30). Plaintiffs reply that Weeks Marine erroneously alleges that it does not produce a structural fill, because although its permits require some DM to be disposed as waste, they also require that some of the DM be beneficially reused as something other than waste, and that the beneficially reused portion would meet the claim construction. In support of their beneficial reuse theory, Plaintiffs point to a permit unrelated to the Paulsboro Project that

required Weeks Marine to test the DM before reusing it, and such testing Plaintiffs argue, demonstrates that the DM would be fit for uses like the ones enumerated in *TDM Markman*. (Pl. Reply Br. at 13, Ex. 7 at 8, Weeks Marine’s December 10, 2010 Waterfront Development Permit for the Greenville Facility at Foot of Colony Road, Jersey City, NJ, the “Jersey City Permit” ¶ 20 (requiring that all DM “shall be tested in accordance with the attached protocol entitled ‘Protocol for the Testing of Processed Dredged Material for Use as Structural Fill’”)). To analyze whether Weeks Marine’s process at the Paulsboro site meets the “structural fill” part of this step, the Court first determines which permits and contracts are relevant to the Paulsboro Project. Second, the Court determines which portion of DM is subject to Weeks Marine’s allegedly infringing process. Third, the Court determines whether Weeks Marine’s process necessarily makes the relevant portion of DM fit for use as “structural fill” as construed.

First, the Court finds that only Paulsboro documents—and not the Jersey City permit related to the Greenville Facility—are relevant to the Paulsboro Project. On the materials before it for purposes of this request for a preliminary injunction, the Court is unable to determine the relevance of the Jersey City Permit to the Paulsboro Project. (*See* PI OA Tr. 73:16-22 (“[Plaintiffs’ Counsel is] quoting from a permit that has nothing to do with this. That [Greenville facility in Jersey City] had to do with an in-barge processing system that Weeks Marine looked at for a while but then totally moved away from and went with the Paulsboro project.”)).¹¹ The approved drawings in the Jersey City Permit are for “Weeks Marine Inc. Dredged Materials Processing Facility, Greenville Facility, Jersey City, NJ.” (*See* Pl. Moving Br. Ex. 7, Jersey City Permit ¶ 12). The Jersey City Permit does not connect the Greenville Facility to the processing

¹¹ Indeed, the Greenville Permit’s serial number is not referenced in any of the Paulsboro documents, so it appears to the Court that none of the Paulsboro documents subsumed any of the testing requirements from Greenville. Without proper testing to screen for contaminants of concern, it is unclear to the Court how Weeks Marine’s DM would be fit for anything similar to the enumerated uses set forth in *TDM Markman*.

facility used for the Paulsboro Project. (*See* PI OA 125:20-25, 126:1-4). Instead—for purposes of determining which portion of DM is subject to Weeks Marine’s allegedly infringing process—the Court relies on documents that do clearly relate to Paulsboro.

Second, the Court finds that the Paulsboro-related documents only mandate that an 86,000 CY portion of fine-grained DM are subject to Weeks Marine’s allegedly infringing process. The requirements under the relevant documents are as follows: (1) the October 15, 2010 Paulsboro Permit to SJPC, requires “dredg[ing] and dispos[ing] [of] approximately 86,000 CY of fine grain material, containing contaminants of concern (COC’s) exceeding Residential Direct Contact Soil Remediation Standards (RDCSRS), in the Gloucester County Solid Waste Complex”¹² (Pl. Moving Br. Ex. 4 ¶ 1); (2) the January 28, 2011 Department of the Army Permit to SJPC, requires that “[t]he 86,000 cubic yards of fine-grained material which exceeds the NJDEPN on-Residential Soil Remediation Standards as depicted on the approved plan, shall be disposed of at the Gloucester County Solid Waste Complex Landfill” (Pl. Moving Br. Ex. 5 ¶ 11); (3) GCIA’s April 26, 2011 Modification Request, requires that “86,000 CY of dredge material will utilize the in-barge processing approach whereas the balance of the fine grain material, or 46,000 CY, is compliant with NJDEP Residential Soil Remediation standards and therefore will be dredged and transported to the asphalt stockpile pad and processed per existing Permit Condition 18 Item a”¹³ (Pl. Moving Br. Ex. 6); and (4) NJDEP’s July 6, 2011

¹² The Court notes that the permit also calls for 46,000 CY of fine grain DM, meeting the [Residential Soil Standards], as fill material; and 202,000 CY of coarse grain DM, which meets [Residential Soil Standards] as fill material.” (Pl. Moving Br. Ex. 4, October 15, 2010 Paulsboro Permit). However, during oral argument, Defendants explained repeatedly—and Plaintiffs did not meaningfully rebut—that the 86,000 CY of waste would be the only cubic yards of DM subject to the Weeks Marine process that allegedly infringes ‘731. (*See* PI OA Tr. 81:14-21, 82:21-24, 97:14-17). More specifically, although 46,000 CY of fine grain and 202,000 CY of coarse grain DM *will* be used as structural fill, these two amounts *will not* be processed in the method at issue for this preliminary injunction. Therefore, the only DM for which it matters whether it will be used as structural fill is the 86,000 CY.

¹³ Item 18 a requires: “The 132,000 CY fine-grained material shall be off-loaded via mechanical means and transported to the asphalt stockpile pad as depicted in the plan entitled ‘Dredging Plan, Off-Site Material.’ (Pl. Moving Br. Ex. 4, October 15, 2010 Paulsboro Permit). With the materials in front of it at this juncture, the Court is

Modification Confirmation, requires “[t]he 86,000 CY balance of fine-grained materials exceeding the Department’s Non-Residential Soil Remediation Standards . . . will be amended via in-barge processing at the DMPF. Subsequently this material shall be disposed of at the Gloucester County Solid Waste Complex Landfill.” (Pl. Moving Br. Ex. 8 ¶ 2). According to the four relevant Paulsboro documents before the Court, only 86,000 CY of fine-grained material is subject to Weeks Marine’s allegedly infringing process, and therefore the Court only examines whether Weeks Marine’s process necessarily makes these 86,000 CY fit for use as “structural fill” as construed.

Third, the Court finds that Weeks Marine’s process does not necessarily make the relevant portion of DM fit for use as “structural fill,” because the relevant portion of DM is used as waste. (*See* PI OA 110:19-21 (“A waste . . . is an antithesis of . . . a beneficial use. It is waste.”)). More specifically, Plaintiffs have failed to satisfy their burden to establish that they are likely to succeed in showing that the 86,000 CY of DM subject to Weeks Marine’s process would be fit for the “myriad of uses” such as the ones set forth in *TDM Markman*. Indeed, Weeks Marine has set forth a substantial question, because the relevant Paulsboro documents mandate only that the 86,000 CY be used as waste to be shipped to the Gloucester landfill. The documents do not establish, as Plaintiff argues, that this portion of DM would be subject to contaminant testing that would make the resulting material fit for use as anything other than waste, and Plaintiffs have not put anything before the Court that has convinced it that untested waste—albeit waste that has been treated with an additive slurry—would fall into any category similar to the ones enumerated in *TDM Markman*.

unable to determine whether these “Off-Site Materials” are processed in a manner that is likely to infringe the ‘731 patent.

Because Defendants have raised a substantial question as to whether Plaintiffs have shown a likelihood of success in establishing infringement, the Court finds that this prong of the preliminary injunction analysis weighs in favor of denying the preliminary injunction.¹⁴

C. Balance of Hardship

In the third preliminary injunction inquiry, the Court balances the injury to the patentee if the injunction is denied against the injury to the accused infringer if the preliminary injunction is granted. *See Oakley*, 316 F.3d at 1346. Because Plaintiffs have not demonstrated either a likelihood of success on the merits or irreparable harm, the balance of hardships does not weigh in favor of Plaintiffs.

¹⁴ Because the Court finds that Plaintiffs have not carried their burden as to the likelihood of success with respect to infringement, the Court does not perform a full analysis as to whether Defendants have shown that Plaintiffs are vulnerable to an invalidity challenge as to obviousness under 35 U.S.C. § 103. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 407 (2007) (“[W]hen the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.”) (citation omitted). At the preliminary injunction stage, the accused infringer prevails by showing that the patent is “vulnerable” to an obviousness challenge, unless the patentee shows that the invalidity defense lacks substantial merit. *Altana Pharm. AG*, 566 F.3d at 1005-06 (citations omitted). Here, Defendants raise persuasive arguments with respect to vulnerability. First, they submit nine prior art references—one patent and eight industry publications that were not in front of the examiner (OA PI TR. 197:24)—arguing that combining steps in the references to infer the entire ‘731 process would have been obvious to a person of ordinary skill in the art. *See KSR*, 550 U.S. at 417 (noting that where combined steps do “no more than they would in separate, sequential operation” or “simply arrange[] old elements with each performing the same function it had been known to perform . . . yield[ing] no more than one would expect from such an arrangement,” then the combination is obvious) (citations and quotations omitted). Second, Defendants’ expert demonstrates how numerous references submitted meet each of the seven steps of Claim One of the ‘731 patent. Indeed, the Court’s own review of the prior art attached to Defendants’ opposition brief reveals that six references meet step one of the ‘731 patent, four references meet step two, three references meet step three, two references meet steps four and five, four references meet step six, and six references meet step seven. Notably, one reference meets six of the seven steps in Claim One. *See* US Environmental Protection Agency, *ARCS Remediation Guidance Document*, EPA905-B94-003, at *11, *12, *25, *50, *53, *54 (1994) (Declaration of Christopher R. Ryan in Support of Weeks Marine, Inc.’s Opposition Brief, the “Ryan Opp. Decl.” Ex. 3). The EPA reference is missing only step five, pumping the slurry to the barge, which the Court finds in other references. *See* A. Toor & R. Lanter, *An Innovative In-Situ Mixing Technology and Its Applications in the Waste Remediation Industry*, Thirty-Third Hanford Symposium on Health and the Environment, at 1091 (1994) (“Several additive delivery routines can be used, including . . . pumping additive slurry . . .”) (Ryan Opp. Decl. Ex. 5); Mark K. Stinson & Stephen Sawyer, *In Situ Treatment of PCB-Contaminated Soil*, U.S. EPA Site Papers, at 505 (1990) (“To prepare a feed batch, a measured amount of water was fed to a . . . mixing tank. . . [and a] positive displacement pump then transferred the slurry to the drill rig.”) (Ryan Opp. Decl. Ex. 6). Although the Court finds Defendants’ arguments initially persuasive, it reserves judgment as to invalidity and obviousness for a later stage in the litigation.

D. Public Interest

In the fourth preliminary injunction inquiry, the Court determines how issuing the preliminary injunction would impact the public interest. *See id.* at 1339. Plaintiffs argue that “no public interest is served by allowing patent infringement,” *A.K. Stamping Co., Inc. v. Instrument Specialties Co., Inc.*, 106 F. Supp. 2d 627, 655 (D.N.J. 2000) (citation omitted), and that where a likelihood of infringement has been shown, “the public interest is almost always served by vindicating the patentee’s rights.” *Lawman Armor Corp. v. Winner Int’l, Inc.*, No. 01-1605, 2002 WL 123342, at *55 (E.D. Pa. Jan. 28, 2002) (citation omitted). (Pl. Moving Br. at 37). Here, however, the Court has found that Plaintiffs have not demonstrated a likelihood of success on the merits, and the Court has noted the persuasiveness of Defendants’ arguments that Plaintiffs are vulnerable to an obviousness challenge.

On the other hand, the public interest is undoubtedly served by the completion of the Paulsboro Project, which is a major public works project. According to State Senate President Stephen M. Sweeney, the Paulsboro Project will be “the largest economic development project that Gloucester County has ever undertaken . . . [and] is a great opportunity to create jobs, and economic vitality in Paulsboro and all of the towns surrounding this region.” According to Assemblyman and Paulsboro Mayor John Burzichelli, “[t]his port is going to be a major contribution to the economic renewal of the Borough of Paulsboro.” *New \$250 Million SJPC Marine Terminal in Paulsboro is SNJBP’s Quarterly Impact Award Winner*, SNJ Business People, June 8, 2011 (Peterson Opp. Decl. Ex. B). Specifically, the Port is projected to create 2,000 jobs and about \$12 million per year in tax revenues. *Paulsboro Marine Terminal Project Moving Ahead*, ClearysNoteBook, Jan. 1, 2011 (Peterson Opp. Decl. Ex. C). Therefore, the public interest weighs in favor of denying the preliminary injunction.

IV. CONCLUSION

The Court has found that Plaintiffs failed to demonstrate irreparable harm and likelihood of success on the merits, both of which are required for granting a preliminary injunction. Additionally, the Court has found that the balance of hardships does not weigh in favor of Plaintiffs and that the public interest favors Defendants. For these reasons, Plaintiffs TDM and UTEX's motion for a preliminary injunction—(D.E. 14 (11-3850); D.E. 7 (11-4338))—is DENIED. An appropriate Order will accompany this Opinion.

s/Esther Salas
Esther Salas, U.S.D.J.